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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,351	03/07/2001	Calvin D. Ostler	5038.1 P	4906

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DLA PIPER US LLP  
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SAN DIEGO, CA 92121-2133

EXAMINER

WILSON, JOHN J

ART UNIT PAPER NUMBER

3732

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/801,351

Applicant(s)

OSTLER ET AL.

Examiner

John J. Wilson

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 148-159 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 148-159 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/25/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 150 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure as originally filed does not teach using unpackaged LEDs, and as such, this limitation is improper new matter.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 148, 151, 152, 154 and 159 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al (WO 99/16136) in view of Hochstein (6045240). Mills shows a plurality of LEDs 43, thermal substrate 48, heat pipe 45, pages 14 and 15, and Fig. 5, located between the LED substrate 48 and heat sink 51 and control circuitry

42, 44 and 52. Mills does not show using LEDs that have a first electrically and thermally conductive substrate connected to a second thermally conductive and electrically insulating substrate. Hochstein shows LEDs 28 that include a first substrate 50 that is electrically and thermally conductive, column 8, lines 20-25, and a second substrate 56, 58 that is thermally conductive and electrically insulating and connected to a heat sink 36, column 6, lines 5-34. It would be obvious to one of ordinary skill in the art to modify Mills to include using LEDs as shown by Hochstein in order to better distribute the heat away from the source and electrically isolate the conductive parts. As to claim 154, see optical element 41 of Mills. As to claim 159, the method steps are obvious in view of shown assembled structure.

Claims 149, 153 and 155-158 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al (WO 99/16136) in view of Hochstein (6045240) as applied to claims 148 and 154 above, and further in view of Cao (6331111). The above combination does not show cups or cups with a reflective surface or cups with angled walls or a lens. Cao teaches using LEDs that are located in cups 102a and Fig. 9, that have angled walls and coated with a reflective surface, column 9, lines 42-44, and also teaches using a lens 1407. It would be obvious to one of ordinary skill in the art to modify the above combination to include LEDs as shown by Cao in order to best provide the desired light to the desired area. Cao also teaches using plural connected substrates, Figs, 11a and 11b. As to claim 158, Cao also teaches using different wavelengths, column 1, lines 29-34.

Claim 150 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al (WO 99/16136) in view of Hochstein (6045240) as applied to claim 148 above, and further in view of Kovac et al (6200134). The above combination does not show using unpackaged LEDs. Kovac teaches using unpackaged LEDs. It would be obvious to one of ordinary skill in the art to modify the above combination to include using unpackaged LEDs as shown by Kovac in order to make use of known LEDs used in the art.

#### ***Information Disclosure Statement***

The IDS filed July 25, 2006 has been considered and an initialed copy is attached.

#### ***Response to Arguments***

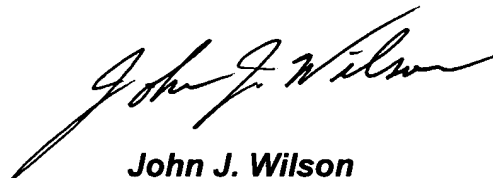
Applicant's arguments filed October 10, 2006 have been fully considered but they are not persuasive. Applicant's remarks are responded to in the above rejections of the new claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Wilson whose telephone number is 571-272-4722). The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez, can be reached at 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "John J. Wilson". The signature is fluid and cursive, with a long horizontal stroke extending to the left.

**John J. Wilson**  
**Primary Examiner**  
**Art Unit 3732**

jjw  
November 15, 2006